

$$\textcircled{1} \quad P = ?$$

$$\text{Data: } m = 1600 \text{ kg}$$

$$v = 80 \text{ m/s W}$$

$$\text{EQ: } P = m v$$

$$\text{SUB: } P = (1600 \text{ kg})(80 \text{ m/s W})$$

Ans
UNITS

$$P = \underbrace{128,000}_{\text{kg}} \cdot \underbrace{\text{m/s W}}_{\text{m/s W}}$$

③ $v = ?$

Data $m = .004 \text{ kg}$
 $p = 3.86 \text{ kg m/s W}$

eq $p = m v$

$$\frac{3.86 \text{ kg m/s W}}{.004 \text{ kg}} = \frac{.004 \text{ kg } v}{.004 \text{ kg}}$$

$$v = 965 \text{ m/s W}$$

4B $P = ?$

$m = 70 \text{ kg}$

@B $v = 5 \text{ m/s W}$

} Data

Eq $P = mv$

SUB $P = (70 \text{ kg})(5 \text{ m/s W})$

$P = 350 \text{ kg} \cdot \text{m/s W}$

$$\begin{aligned} 4E \quad P &= ? \\ m &= 70 \text{ kg} \\ v &= 4 \text{ m/s } W \end{aligned}$$

$$EQ \quad P = mv$$

$$SUB \quad P = (70 \text{ kg})(4 \text{ m/s } W)$$

$$\begin{aligned} \text{Ans } P &= 280 \text{ kg} \cdot \text{m/s } W \\ \hline \text{UNITS} \end{aligned}$$

7.

RB

$$V_{RB} = ?$$

$$m_{RB} = 100 \text{ kg}$$

$$P_{RB} = ?$$

LB

$$m_{LB} = 160 \text{ kg}$$

$$V_{LB} = 5 \text{ m/s W}$$

$$P_{LB} = ?$$



$$P_{LB} = (m_{LB})(V_{LB})$$

$$= (160 \text{ kg})(5 \text{ m/s W})$$

$$P_{LB} = 800 \text{ kg m/s W}$$

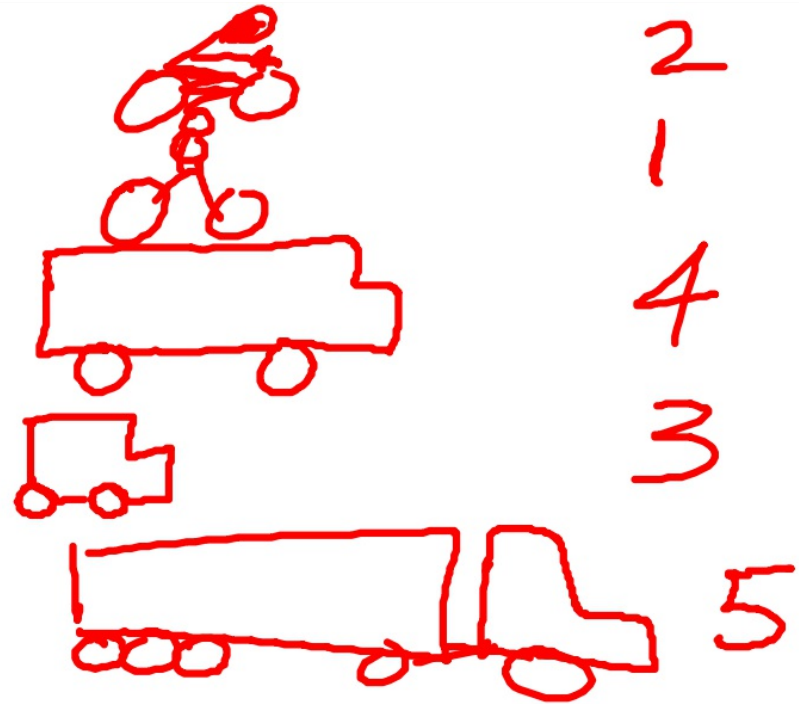
$$P_{RB} = (m_{RB})(V_{RB})$$

$$\frac{800 \text{ kg m/s E}}{100 \text{ kg}} = \frac{(100 \text{ kg})(V_{RB})}{100 \text{ kg}}$$

$$8 \text{ m/s E} = V_{RB}$$

$$P_{RB} = 800 \text{ kg m/s E}$$

- A motorcycle
- B BIKE
- C School BUS
- D H3 SUV
- E TRACTOR TRAILER



E C D A B
 Lowest Highest
 $\vec{p} = m \vec{v}$
 $v = \frac{1}{m}$

CONSTANT
P

